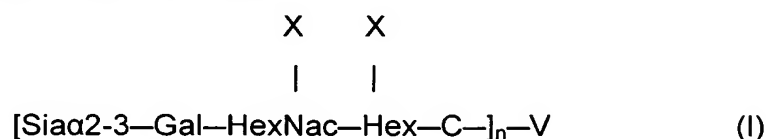


This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

Claims 1-31(canceled).

32(New). A method for treating an infection in a patient, comprising administering to a patient in need thereof a therapeutically effective amount of sialyzed carbohydrates of formula I:



wherein

Sia means a sialic acid or an O-acetyl sialic acid derivative in an  $\alpha$  2-3 bond,

Gal means a galactose-monosaccharide unit,

HexNac means an N-acetylated galactosamine-monosaccharide unit or glucosamine-monosaccharide unit (GalNac or GlcNac),

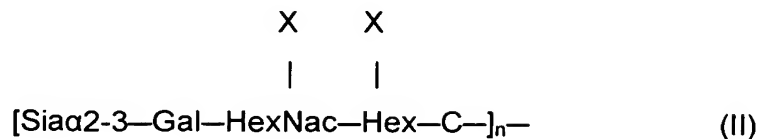
Hex means a galactose-monosaccharide unit or glucose-monosaccharide unit (Gal or Glc),

C represents HexNac or Hex or is absent,

n represents 1 to 50,

V is a) OH when n represents 1, b) a carbohydrate residue or c) a connecting point on a carrier T, with the proviso that when V represents b) a carbohydrate residue or c) a carrier T, n means the number of the carbohydrate units of formula II that are each directly bound to this b) carbohydrate residue or c) carrier, and formula II is as follows:

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 Amendment dated: May 18, 2009  
 Reply to OA of: December 17, 2008



wherein X is a first sialic acid or an O-acetyl sialic acid derivative thereof, optionally having a second sialic acid or an O-acetyl sialic acid derivative bound to the first sialic acid or O-acetyl sialic acid derivative in an  $\alpha$  2-3 bond, a phosphate group, a sulphate group, carboxyl group, or a monosaccharide having a phosphate group, sulphate group or carboxyl group,

wherein only one of the residues X is present,

wherein n is 1 to 50, and

wherein the sialyzed carbohydrate are in a form so that sia  $\alpha$  2-3 residues of said sialyzed carbohydrates bind to pathogens.

33(New). The method according to claim 32, wherein one of the following criteria i) through iii) are met:

- i) Sia represents acetyl neuraminic acid (NeuAc) or N-glycolyl neuraminic acid (NeuGc),
- ii) the carrier T is selected from the group consisting of a peptide, a protein, a polymer, and a biopolymer, and
- iii) the carbohydrate residue constituting residue V is a monosaccharide residue, an oligosaccharide residue or a polysaccharide residue.

34(New). The method according to claim 32, wherein the carbohydrates of formula I are selected from the group consisting of disialyl-lacto-N-tetraose (DS-LNT), disialyl-lacto-N-neo-tetraose (DS-LNnT), glycomacropeptide (GMP), ganglioside G<sub>D1a</sub>, ganglioside G<sub>T1b</sub> and ganglioside G<sub>T1c</sub>.

35(New). The method according to claim 32, wherein T is a glycolipid or ganglioside.

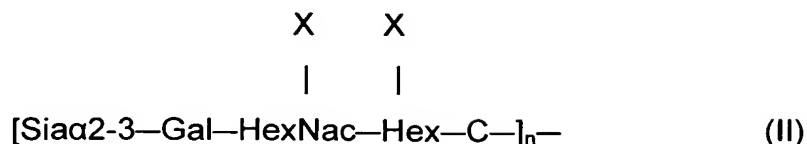
36(New). The method according to claim 32, wherein the carbohydrate or carbohydrates of formula I are administered in an amount of 1 mg per kg of body weight of said patient.

37(New). The method according to claim 32, wherein the patient has an infection of the gastrointestinal tract, blood system, respiratory passage, urogenital tract, or nasopharynx.

38(New). The method according to claim 32, wherein the sialyzed carbohydrates are administered in the form of a fluid, pharmaceutical, dietetic, or food composition that is not human milk.

39(New). The method according to claim 38, wherein the sialyzed carbohydrates are administered by oral, lingual, nasal, bronchial, vaginal, topical, *per os* administration, probe, or infusion administration routes.

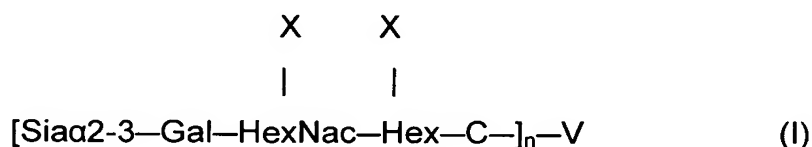
40(New). The method according to claim 32, wherein the carbohydrates of formula I are selected from the group consisting of disialyl-lacto-N-tetraose (DS-LNT), disialyl-lacto-N-neo-tetraose (DS-LNnT), glycomacropeptide (GMP), ganglioside G<sub>D1a</sub>, ganglioside G<sub>T1b</sub> and ganglioside G<sub>T1c</sub>, and wherein the compound of formula I is bound to a compound of formula II as follows:



wherein X is NeuAc, NeuGc, or a derivative thereof,  
wherein only one of the residues X is present, and  
wherein n is 1 to 50.

41(New). The method of claim 32, wherein the patient has an infection of the gastrointestinal tract and the patient is human.

42(New). A pharmaceutical, food or dietetic composition comprising a sialyzed carbohydrate of formula I:



wherein Sia means a sialic acid or an O-acetyl sialic acid derivative in an  $\alpha 2-3$  bond,

Gal means a galactose-monosaccharide unit,

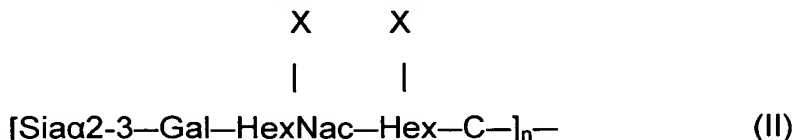
HexNac means an N-acetylated galactosamine-monosaccharide unit or glucosamine-monosaccharide unit (GalNAc or GlcNAc),

Hex means a galactose-monosaccharide unit or glucose-monosaccharide unit (Gal or Glc),

C represents HexNac or Hex or is absent,

n represents 1 to 50,

V represents a) OH, b) a carbohydrate residue or c) a connecting point on a carrier T, with the proviso that, if V represents a) OH, n represents 1, and, if V represents a b) carbohydrate residue or a carrier T, n means the number of the carbohydrate units that are each directly bound to this b) carbohydrate residue or c) carrier and wherein formula I has at least one carbohydrate unit of formula II:



wherein X is a first sialic acid or an O-acetyl sialic acid derivative thereof, optionally having a second sialic acid or an O-acetyl sialic acid derivative bound to the first sialic acid or O-acetyl sialic acid derivative in an  $\alpha$  2-3 bond, a phosphate group, a sulphate group, carboxyl group, or a monosaccharide having a phosphate group, sulphate group or carboxyl group,

wherein only one of the residues X is present,

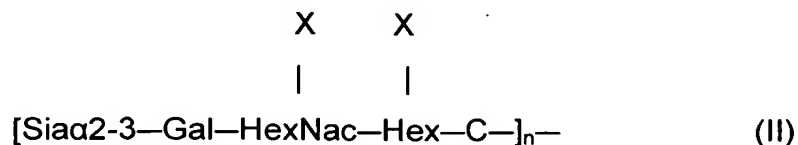
wherein n is 1 to 50, and

wherein the sialyzed carbohydrate are in a form so that sia  $\alpha$  2-3 residues of said sialyzed carbohydrates bind to pathogens.

43 (New). The composition according to claim 41, further comprising an auxiliary agent, diluent, moisturizing agent, thickening agent, flavoring agent, sweetening agent, or carrier.

44. (New) A food or dietetic composition comprising a sialyzed carbohydrate, wherein the sialyzed carbohydrate comprises a first carbohydrate selected from the group consisting of disialyl-lacto-N-tetraose (DS-LNT), disialyl-lacto-N-neo-tetraose (DS-LNnT), glycomacropeptide (GMP), ganglioside  $G_{D1a}$ , ganglioside  $G_{T1b}$  and ganglioside  $G_{T1c}$ ; and wherein DS-LNnT, GMP, ganglioside

G<sub>D1a</sub>, ganglioside G<sub>T1b</sub>, and ganglioside G<sub>T1c</sub> are bound to a carbohydrate of formula (II):



wherein X is NeuAc or NeuGc;

wherein only one of the residues X is present,

wherein n is 1 to 50, and

wherein the sialyzed carbohydrate are in a form so that sia $\alpha$ 2-3 residues present in the sialyzed carbohydrate bind to bacterial adhesins upon administration of the composition to a human or animal patient.

45. (New) The composition according to claim 44, wherein a sialic acid or an O-acetyl sialic acid derivative is bound to the NeuAc or NeuGc.

46. (New) The composition according to claim 44, wherein a phosphate group, sulphate group or carboxyl group is bound to the NeuAc or NeuGc.

47. (New) The composition according to claim 44, wherein the second carbohydrate is directly bound to the first carbohydrate.

48. (New) The composition according to claim 44, wherein the second carbohydrate is bound to the first carbohydrate via a carrier.

49. (New) The composition according to claim 49, wherein the carrier is polyhydroxybutanoic acid.

50. (New) The composition according to claim 44, wherein the composition is in a form selected from the group consisting of a beverage, baby formula, food supplement, infant formula, milk product, chocolate, cheese, sausage, meat product, anabolic food, and probe food.

51. (New) A method for treating a bacterial infection in a patient, comprising administering an effective amount of the composition according to claim 44 to said patient.

52. (New) The method according to claim 40, wherein the patient has an infection of the gastrointestinal tract, blood system, respiratory passage, urogenital tract, or nasopharynx.

53. (New) The method according to claim 53, wherein the patient is a pregnant women, an infant, debilitated person, or an elderly person.